

CLAIM SUMMARY DOCUMENT

WE CLAIMS:

1. (Currently Amended) A driving ~~Driving~~ system (1) for a separator having a centrifugal drum with a vertical axis of rotation, comprising:
 - ~~a) which has a vertically aligned driving spindle (2) for configured to accommodate a centrifugal drum; drum, which is not shown here and which is placed onto the driving spindle (2),~~
 - b) the driving spindle (2) being disposed arranged by means of an upper a neck bearing (3) and a lower footstep bearing (4) particularly in an opening (14) of a drive housing (5);
 - ~~c) and the neck bearing being supported in an axially rigid and radially resilient manner on the machine housing; and (5),~~
characterized in that
 - d) the neck bearing (3) is being constructed as an angular ball bearing and supporting bearing,
 - ~~e) the neck bearing (3) supports the centrifugal drum in the downward direction on a spherical surface-shaped supporting surface of the machine housing (2).~~
2. (Currently Amended) ~~Driving~~ The driving system according to Claim 1, characterized in that wherein the neck bearing (3) is supported on the an inside in the an upward direction on the driving spindle (2) and in the a downward direction toward the an outside on an outer neck bearing ring (8).
3. (Currently Amended) The ~~Driving~~ driving system according to Claim 1 ~~one of the preceding claims,~~
characterized in that the wherein the neck bearing includes a neck bearing ring (8) has having a ball socket-ball and socket-type construction on its underside (12) and rests resting on a the complementarily spherical section-type shaped bearing collar (13) of the drive housing (5) and in this manner the spherical surface-shaped supporting surface.
4. (Currently Amended) The driving ~~Driving~~ system according to Claim 1 ~~to one of the preceding claims,~~

~~characterized in that the~~ wherein a center point of the spherical-surface-shaped supporting surface is situated in the an area of the footstep bearing (4), ~~particularly in its center.~~

5. (Currently Amended) The driving ~~Driving~~ system according to Claim 1 ~~one of the preceding claims,~~
~~characterized in that wherein~~ the spherical-surface-shaped supporting surface is utilized for the a weight-dependent frictional damping of the driving system.

6. (Currently Amended) The driving ~~Driving~~ system according to Claim 3 ~~one of the preceding claims,~~
~~characterized in that wherein~~ the spherical-surface-shaped supporting surface is utilized for the a weight-dependent frictional damping of the driving system.

7. (Currently Amended) The driving ~~Driving~~ system according to Claim 1 ~~one of the preceding claims,~~
~~characterized in that wherein~~ a gap (9) is ~~constructed~~ disposed between the an outer circumference of the neck bearing ring (8) and the an inner circumference of the drive housing (5).

8. (Currently Amended) The driving ~~Driving~~ system according to Claim 7 ~~one of the preceding claims,~~
~~characterized in that wherein~~ a sealing and spring ring (10) bridges the gap (9).

9. (Currently Amended) The driving ~~Driving~~ system according to Claim 8 ~~one of the preceding claims,~~
~~characterized in that wherein~~ the sealing and spring ring (10) ~~is constructed as~~ includes an O-ring which is ~~preferably~~ arranged in a groove (11) on the an outer circumference of the neck bearing ring (8), from which ~~is it~~ projects radially to the an outside of the neck bearing ring.

10. (Currently Amended) The driving ~~Driving~~ system according to Claim 1 ~~one of the preceding claims,~~
~~characterized in that wherein~~ the footstep bearing (4) is radially fixed in the drive housing (5) and is axially ~~constructed~~ disposed as a movable bearing.

11. (Currently Amended) ~~The driving~~ Driving system according to Claim 1 ~~one of the preceding claims,~~
~~characterized in that the~~ wherein a supporting surface of the neck bearing ring on the drive housing (5) is ~~in an operative connection~~ connected with a lubricating system for lubricating the neck bearing and the footstep bearing (3, 4).

12. (Currently Amended) ~~The driving~~ Driving system according to Claim 1 ~~one of the preceding claims,~~
~~characterized in that~~ wherein the neck bearing (3) and the footstep bearing (4) are ~~mutually~~ connected by a duct (16), ~~particularly a ring duct~~ around the driving spindle, so that the two bearings (3, 4) can be jointly lubricated.

13. (Currently Amended) ~~The driving~~ Driving system according to Claim 1 ~~one of the preceding claims,~~
~~characterized in that~~ wherein a first lubricating bore for a lubricant, ~~such as oil or grease,~~ leads into the an area around the driving spindle (2) ~~above the neck bearing~~ (3).

14. (Currently Amended) ~~The driving~~ Driving system according to Claim 13 ~~one of the preceding claims,~~
~~characterized in that~~ wherein a second lubricating bore (17) is provided for guiding lubricant to the footstep bearing (4).

15. (New) The driving system of Claim 4, wherein the center point is situated in a center of the footstep bearing.

16. (New) The driving system of Claim 13, wherein the lubricant is one of oil and grease.